IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.	: 10/749,583	Confirmation No.:	2709
Applicant	: Daryl Carvis. Cromer et al.		
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Title	: REMOTE MANAGEMENT OF BOOT APPLICATION		
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SUBSTITUTE APPEAL BRIEF UNDER 37 C.F.R. §41.37

This paper is a substitute appeal brief responsive to a Notice of Non-Compliant Brief mailed January 18, 2010. This brief substitutes for the brief submitted pursuant to 37 CFR §41.37 in furtherance of the Notice of Appeal filed on October 14, 2009. In light of the timely submission of this Substitute Appeal Brief pursuant to 37 CFR § 41.37 and the arguments contained herein, Appellant respectfully requests that the Board reverse the rejections of the pending claims and remand this application to the Examiner for reconsideration consistent with an order that the Examiner pass this case to issuance unless a proper rejection to the claims can be made.

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I. REAL PARTY IN INTEREST

The real party in interest is International Business Machines Corporation ("IBM") having a principle place of business at New Orchard Road, Armonk, NY 10504, as assignee of patent(s) resulting from the above-referenced patent application, in view of the assignment executed by the inventor to IBM.

II. RELATED APPEALS AND INTERFERENCES

There are no related appeals nor interferences known to Appellants, Appellants' legal representative, or assignee which will directly affect or be directly affected by or having a bearing on the Board's decision in this pending appeal.

III. STATUS OF CLAIMS

Claims 1-7, 12-18, 38-41, and 48-50 are pending and stand rejected. Claims 8-11, 19-37, and 42-47 are cancelled. Claims 1-7, 12-18, 38-41, and 48-50 are appealed herein. Claims 1-7, 12-18, 38-41, and 48-50 stand rejected by a final Office action dated August 14, 2009. More particularly:

1) Claims 1-7, 12, 15-18, 38, 39 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Girard, US Patent No. 7,093,124 (hereinafter "Girard") in view of Dayan et al., US Pub. No. 200210188837 (hereinafter "Dayan") and in view of Rothman et al., US Pub. No.200410267926 (hereinafter "Rothman").
2) Claims 13, 14 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Girard in view of Dayan, in view of Rothman, and in view of Kim, US Pub. No. 20040163008 (hereinafter "Kim").
3) Claims 48 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Girard in view of Dayan, in view of Rothman, and in view of Connery et al., US Patent No. 6,606,709 (hereinafter "Connery").
4) Claim 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Girard in view of Dayan, in view of Rothman, in view of Kim, and in view of Connery.

IV. STATUS OF AMENDMENTS

All amendments filed up through the final Office action dated June 5, 2009, have been entered. No after final amendment was filed. No other amendments have been filed subsequent to the final rejection. The claims found in the Exhibit of this Appeal Brief reflect the appealed claims as they are understood by the Appellants at the date of this appeal.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Appellants' independent claim 1 as currently presented claims a method for booting a remote client via a bootable image on the remote client over a network. (*See, e.g.,* Specification, pp. 7-8, par. 20, first sent. and second to last sent and FIG. 6).[1] The method involves selecting the bootable image on the remote client to boot the remote client, the bootable image comprising software to determine the trustworthiness of a software application on a maintenance server prior to executing the software application, for the remote client. (*See, e.g.,* Specification, pp. 7-8, par. 20, lines 17-18 and 22-24 on pg. 7, and lines 2-5 on pg. 8 and FIGs. 5A, 5B, and 6.). The method also involves generating a wake-on-LAN packet with a partition identification, the partition identification comprising an address of a location of the bootable image, to identify the location within a local resource of the remote client. (*See, e.g.,* Specification, pg. 7, par. 20, lines 22-24; pg. 15, par. 42, lines 17-20; and pg. 16, par. 45, lines 22-27 and Fig. 6.). And, the method involves transmitting the wake-on-LAN packet to the remote client to wake up the remote client and to instruct a pre-boot application of the remote client to boot via the bootable image. (*See, e.g.,* Specification, pg. 7, par. 20, lines 22-24 and pg.14, par. 39, lines 13-18 and 22-24, and pg. 16, par. 45, lines 25-28 and Fig. 6).

Appellants' independent claim 13 as currently presented claims a data processing system for booting a remote client via a bootable image on the remote client on a network. (*See, e.g.,* Specification, pp. 7-8, par. 20, first sent. and second to last sent. and par. 22, lines 17-20). The system comprises a server computer system in communication with at least one client computer system, the server computer system comprising a processor capable of selecting the bootable image on the remote client to boot the remote

[1] Note that "Specification" hereinafter refers to Application at issue, i.e., Application no. «Patent Patent Application Number» filed «Patent Patent Filing Date: July 4, 1996».

client, the bootable image comprises software to determine the trustworthiness of a software application on a maintenance server prior to executing the software application, for the remote client. (*See, e.g.,* Specification, pp. 7-8, par. 20, lines 17-18 and 22-24 on pg. 7, and lines 2-5 on pg. 8 and par. 22, lines 17-20; and pg. 10, par. 29, lines 25-29, original claim 13, and FIGs. 3 and 6). The system comprises wherein the server computer system is capable of generating a wake-on-LAN packet with a partition identification, the partition identification comprising an address of a location of the bootable image, to identify the location within a local resource of the remote client. (*See, e.g.,* Specification, pg. 7, par. 20, lines 22-24; pg. 15, par. 42, lines 17-20; and pg. 16, par. 45, lines 22-27 and FIGs. 5A, 5B, and 6). The system comprises wherein the server computer system is capable of transmitting the wake-on-LAN packet to the remote client to wake up the remote client and to instruct a pre-boot application of the remote client to boot via the bootable image. (*See, e.g.,* Specification, pg. 7, par. 20, lines 22-24 and pg.14, par. 39, lines 13-18 and 22-24, and pg. 16, par. 45, lines 25-28 and FIG. 6). And, the system comprises a database, the database comprising an indication of one or more clients and the status of their wake-on-LAN functionality (*See, e.g.,* Specification, pg. 9, par. 23 and FIG. 7).

Appellants' independent claim 15 as currently presented claims a computer program product comprising a machine-accessible storage medium containing instructions, which when executed by a machine, cause said machine to perform operations. (*See, e.g.,* Specification, pp. 22-23, pars. 63-64 as well as claim 15 as originally filed). The operations involve selecting the bootable image on the remote client to boot the remote client, the bootable image comprising software to determine the trustworthiness of a software application on a maintenance server prior to executing the software application, for the remote client. (*See, e.g.,* Specification, pp. 7-8, par. 20, lines 17-18 and 22-24 on pg. 7, and lines 2-5 on pg. 8 and FIG. 6.). The operations also involve generating a wake-on-LAN packet with a partition identification, the partition identification comprising an address of a location of the bootable image, to identify the location within a local resource of the remote client. (*See, e.g.,* Specification, pg. 7, par. 20, lines 22-24; pg. 15, par. 42, lines 17-20; and pg. 16, par. 45, lines 22-27 and FIG. 5A, 5B, and 6.). And, the operations involve transmitting the wake-on-LAN packet to the remote client to wake up the remote client and to instruct a pre-boot application of the remote client to boot via the bootable image. (*See, e.g.,* Specification, pg. 7, par. 20, lines

22-24 and pg.14, par. 39, lines 13-18 and 22-24, and pg. 16, par. 45, lines 25-28 and FIG. 6).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

1) Claims 1-7, 12, 15-18, 38, 39 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Girard in view of Dayan, and in view of Rothman.
2) Claims 13, 14 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Girard in view of Dayan, in view of Rothman, and in view of Kim.
3) Claims 48 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Girard in view of Dayan, in view of Rothman, and in view of Connery.
4) Claim 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Girard in view of Dayan, in view of Rothman, in view of Kim, and in view of Connery.

VII. ARGUMENT

A. Claims 1-7, 12, 15-18, 38, 39 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Girard in view of Dayan, and in view of Rothman

The Office action rejected 1-7, 12, 15-18, 38, 39 and 41 stand rejected under 35 USC § 103 as being unpatentable over Girard in view of Dayan, and in view of Rothman. Applicant traverses the rejections with the arguments above in conjunction with the arguments below.

To establish a prima facie case of obviousness, the modification or combination must teach or suggest all of Applicants' claim limitations.[2]

1. Claims 1 and 15

The combination of Girard, Dayan, and Rothman fails to establish a prima facie case of obviousness for independent claims 1 and 15 because the combination fails to teach or suggest all of Applicants' claim limitations. In particular, the combination fails to teach or suggest selecting a bootable image on the remote client to boot the remote

[2] *In re Royka*, 490 F.2d 981, 985, 180 USPQ 580, 583 (CCPA 1974).

client, the bootable image comprising software to determine the trustworthiness of a software application on a maintenance server prior to executing the software application, for a remote client; generating a wake-on-LAN packet with a partition identification, the partition identification comprising an address of a location of the bootable image, to identify the location within a local resource of the remote client; and transmitting the wake-on-LAN packet to the remote client to wake up the remote client and to instruct a pre-boot application of the remote client to boot via the bootable image.

Girard describes a system with a managing computer and a client computer in which an authentication procedure on the client computer implements a user authentication stack via the basic input-output system (BIOS) during a power-on self test (POST) of the client computer.[3] Girard teaches or suggests a client computer that implements an authentication procedure during pre-operating system and, in some embodiments, includes a BIOS user authentication control applet for enforcing platform security.[4]

Girard does not teach or suggest selecting a bootable image on the remote client. The examiner argues that Girard does teach or suggest "…selecting the bootable image on the remote client…." Girard describes downloading the boot code to the remote client.[5] The construction by the examiner ignores the limitations in claims 1 and 15 describing that the "bootable image" is "on the remote client".

Girard does not teach or suggest generating a wake-on-LAN packet with a partition identification (as indicated in the final Office action dated August 14, 2009), because Girard does not expressly describe a wake-on-LAN packet with a partition identification.[6] Also, Girard does not teach or suggest including the address of the bootable image in a partition identification and Girard does not teach or suggest transmitting the partition identification with the address of the bootable image. Girard also does not teach or suggest transmitting an address of a bootable image in the wake-

[3] Girard at col. 5, lines 8-30.
[4] Girard at col. 5, lines 31-60.
[5] Girard at col. 7, lines 16-20.
[6] Office action dated June 11, 2008, at pg 4.

on-LAN packet to instruct the client computer to boot from the bootable image on the remote client.

Dayan teaches generation of a magic packet with one or more bits that indicate to either boot from the hidden partition or not to boot from hidden partition.[7] Dayan does not indicate selection of a bootable image and does not indicate an address for a bootable image. Dayan describes a magic packet that either contains a directive to boot from an alternative bootable image known by the remote client or does not.[8] Dayan indicates that the network interface card will set bits in a register in response to the directive to either boot from the hidden partition or not.[9] Dayan also teaches inserting directive information from a magic packet into a register of the network interface card to indicate activities to perform if BIOS is to boot the hidden partition.[10]

Dayan does not describe a partition identification. Dayan does not describe a partition identification comprising an address. Dayan does not describe the directive information as an address. Dayan does not describe the directive information as an address of a bootable image. Dayan does not describe identifying a location within a local resource of the remote client. Dayan describes the directive information as an indication to set one or more bits in a register of the network interface card that received the magic packet as well as an indication of activities to perform.[11] Dayan does not teach or suggest "selecting the bootable image on the remote client… [and] generating a wake-on-LAN packet with a partition identification, the partition identification comprising an address of a location of the bootable image, to identify the location within a local resource of the remote client…."

And Dayan does not teach or suggest "transmitting the wake-on-LAN packet" because, in accordance with claims 1 and 15, the wake-on-LAN packet is the one generated with the partition identification comprising the address of the bootable image. Dayan does not teach or suggest "transmitting the wake-on-LAN packet" with the partition identification comprising the address of the bootable image.

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[7] See Dayan at par. 42.
[8] See Dayan at par. 35.
[9] See Dayan at par. 35.
[10] See Dayan at par. 8.
[11] See Dayan at pars. 8 and 33- 35.

Rothman teaches access of firmware that executes independent of the operating system in a remote computer system.[12] As highlighted in the rejection, Rothman also teaches passing code to the firmware for execution by the firmware[13] and accessing a memory location in the remote computer system.[14] In particular, Rothman describes a packet that includes an address of a memory location in the remote computer system and an instruction to read from or write to the memory location.[15] Rothman does not teach or suggest selection of a bootable image nor inclusion in a partition identification with a memory address of a location of the bootable image within a local resource of the remote computer system.

Assuming, in arguendo, that the references can be combined in the manner indicated by the Office action, the combination of Girard, Dayan, and Rothman teaches authentication of a communication with a remote computer system that can provide one or more bits to indicate to the remote computer system to either boot from the hidden partition or not to boot from hidden partition and also can send a packet to instruct the remote computer system to read or write from a memory address within the remote system.

The combination fails to teach or suggest claims 1 and 15 and only an improper use of hindsight could change the combination to teach or suggest claims 1 and 15. The combination does not teach or suggest selecting the bootable image on the remote client that comprises software to determine the trustworthiness of a software application on a maintenance server prior to executing the software application. The combination does not teach or suggest generating a wake-on-LAN packet with a partition identification, the partition identification comprising an address of a location of the bootable image, to identify the location within a local resource of the remote client. And the combination does not teach or suggest transmitting the wake-on-LAN packet to the remote client to wake up the remote client and to instruct a pre-boot application of the remote client to boot via the bootable image.

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[12] See Rothman at Abstract.
[13] See Rothman at par. 33.
[14] See Rothman at par. 37.
[15] See Rothman at par. 37.

Despite the attempt to combine up to five references to find some of the claims herein obvious, the rejection fails to cite a reference that transmits an address that is within the remote client for the purpose of executing code, let alone for the purpose of designating an alternate bootable image to boot the remote client. The combination fails to teach or suggest selecting a bootable image on a remote client. And, the combination fails to teach or suggest maintenance of data or access to data about a remote client including an address of a bootable image on the remote client, which is inherent to an ability to select the bootable image on the remote client.

To establish a prima facie case of obviousness, the combination must teach or suggest all of Applicants' claim limitations.[16] The combination fails to teach or suggest all of Applicants' claim limitations. Thus, the combination of Girard, Dayan, and Rothman fails to establish a prima facie case of obviousness for independent claims 1 and 15.

Furthermore, modification of Girard to perform claims 1 and 15 changes a principle of operation of Girard. In particular, Girard describes downloading the boot code to the remote client after establishing contact with the remote client.[17] In claims 1 and 15, the address of the bootable image and the instruction to boot from the bootable image [on the remote client] are in the wake-on-LAN packet that will awaken the remote client. Modifying Girard to select a bootable image on the remote client and to transmit the address to the remote client to boot the remote client changes the principle of operation of Girard because it obviates downloading the bootable image or boot code from the managing server to the remote client.[18] Thus, it would not be obvious to a person of ordinary skill in the art to make the modifications suggested in the rejections.

Applicant argues that the Office action fails to provide prima facie evidence of obviousness for the rejections of claims 1 and 15 so the rejections should be reversed.

2. Claims 2-7, 12, 38-39, and 48

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[16] *In re Royka*, 490 F.2d 981, 985, 180 USPQ 580, 583 (CCPA 1974).
[17] Girard at col. 7, lines 16-20.
[18] Girard at col. 7, lines 16-20.

The dependent claims 2-7, 12, 38-39, and 48 of independent claim 1 incorporate the limitations of independent claim 1. The combination of references fail to teach or suggest the limitations of independent claim 1. Thus, the combination does not teach or suggest all the limitations of dependent claims 2-7, 12, 38-39, and 48, and Applicant respectfully argues that the rejections of the claims be reversed and the dependent claims should be allowed. [19]

3. Claims 16-18, 41, and 50

The dependent claims 16-18, 41, and 50 of independent claim 15 incorporate the limitations of independent claim 15. The combination of references fail to teach or suggest the limitations of independent claim 15. Thus, the combination does not teach or suggest all the limitations of dependent claims 16-18, 41, and 50, and Applicant respectfully argues that the rejections of the claims be reversed and the dependent claims should be allowed. [20]

B. Claims 13, 14 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Girard in view of Dayan, in view of Rothman, and in view of Kim

1. Claim 13

The combination of Girard, Dayan, Rothman and Kim fails to establish a prima facie case of obviousness for independent claim 13 because the combination fails to teach or suggest all of Applicants' claim limitations. In particular, the combination fails to teach or suggest a server computer system in communication with at least one client computer system, the server computer system comprising a processor capable of selecting the bootable image on the remote client to boot the remote client, the bootable image comprises software to determine the trustworthiness of a software application on a maintenance server prior to executing the software application, for the remote client. The combination fails to teach or suggest that the server computer system is capable of generating a wake-on-LAN packet with a partition identification, the partition

[19] See *In re Royka*, 490 F.2d 981, 985, 180 USPQ 580, 583 (CCPA 1974).
[20] See *In re Royka*, 490 F.2d 981, 985, 180 USPQ 580, 583 (CCPA 1974).

identification comprising an address of a location of the bootable image, to identify the location within a local resource of the remote client. And, the combination fails to teach or suggest that the server computer system is capable of transmitting the wake-on-LAN packet to the remote client to wake up the remote client and to instruct a pre-boot application of the remote client to boot via the bootable image.

Girard describes a system with a managing computer and a client computer in which an authentication procedure on the client computer implements a user authentication stack via the basic input-output system (BIOS) during a power-on self test (POST) of the client computer.[21] Girard teaches or suggests a client computer that implements an authentication procedure during pre-operating system and, in some embodiments, includes a BIOS user authentication control applet for enforcing platform security.[22]

Girard does not teach or suggest the server computer system is capable of selecting a bootable image on the remote client. The examiner argues that Girard does teach or suggest "…selecting the bootable image on the remote client…." However, Girard describes downloading the boot code to the remote client.[23] Applicant argues that the construction by the examiner ignores the limitation of claim 13 that the bootable image is selected "on the remote client". Girard, on the other hand, teaches selection of a boot code on the server and downloading that boot code to the remote client.

Girard does not teach or suggest the server computer system is capable of generating a wake-on-LAN packet with a partition identification (as indicated in the final Office action dated August 14, 2009), because Girard does not expressly describe a wake-on-LAN packet with a partition identification.[24] Also, Girard does not teach or suggest including the address of the bootable image in a partition identification. And Girard does not teach or suggest transmitting the partition identification with the address of the bootable image.

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[21] Girard at col. 5, lines 8-30.
[22] Girard at col. 5, lines 31-60.
[23] Girard at col. 7, lines 16-20.
[24] Office action dated June 11, 2008, at pg 4.

Dayan teaches generation of a magic packet with one or more bits that indicate to either boot from the hidden partition or not to boot from hidden partition.[25] Dayan does not indicate selection of a bootable image. Dayan describes a magic packet that either contains a directive to boot from the alternative bootable image or does not.[26] Dayan describes interpretation of the one or more bits as an indication to set a register in a network card[27] and that the BIOS of the remote client checks the register to determine whether to boot from the hidden partition.[28] Dayan also teaches inserting directive information from a magic packet into a register of the network interface card to boot from the designated partition to indicate activities to perform if BIOS is to boot the hidden partition.[29]

Dayan does not describe a partition identification. Dayan does not describe a partition identification comprising an address. Dayan does not describe the directive information as an address. Dayan describes the directive information as an indication to set one or more bits in a register of the network interface card that received the magic packet as well as an indication of activities to perform.[30] Dayan does not describe identifying a location within a local resource of the remote client. Dayan does not teach or suggest "the server computer system …capable of selecting the bootable image on the remote client… [and] generating a wake-on-LAN packet with a partition identification, the partition identification comprising an address of a location of the bootable image, to identify the location within a local resource of the remote client…."

And Dayan does not teach or suggest "the server computer system is capable of transmitting the wake-on-LAN packet" because, in the context of claim 13, the wake-on-LAN packet is the one generated with the partition identification comprising the address of the bootable image. Dayan does not teach or suggest "the server computer system is capable of transmitting the wake-on-LAN packet" with the partition identification comprising the address of the bootable image.

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[25] See Dayan at par. 42.
[26] See Dayan at par. 35.
[27] See Dayan at par. 35.
[28] Dayan at Abstract, last sent.
[29] See Dayan at par. 8.
[30] See Dayan at pars. 8 and 33- 35.

Rothman teaches access of firmware that executes independent of the operating system in a remote computer system.[31] As highlighted in the rejection, Rothman also teaches passing code to the firmware for execution by the firmware[32] and accessing a memory location in the remote computer system.[33] In particular, Rothman describes a packet that includes an address of a memory location in the remote computer system and an instruction to read from or write to the memory location.[34] Rothman does not teach or suggest selection of a bootable image nor inclusion in a partition identification of a memory address of a location of the bootable image within a local resource of the remote computer system.

Kim describes a database with information about one or more management clients and the capability to reboot a management client via a wake-on-LAN packet.[35] According to Kim, a management server 215 obtains information regarding the status of each of the management clients 220 that are part of the network 200 that are managed by management server 215. The specific parameters contained in the database 245 include, depending on how decisions as to loading new disk images are made include: (i) name of the management client; (ii) Medium Access Control (MAC) address of the management client 220; (iii) the OS version; (iv) applications and versions; (v) whether disaster recovery is enabled for the management client 220; (vi) whether rollout is enabled for the management client 220; and (vii) whether the management client 220 can request a new disk image, without first being instructed by the management server. [36] Kim describes a database for a maintenance server that can instruct a client to download a new disk image from a server or boot from a disk image on another server.[37]

Kim is representative of the issues described in the background of the present application, i.e., loading a bootable image from a remote server or booting from the image on the remote server is vulnerable to problems that require manual intervention.[38]

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[31] See Rothman at Abstract.
[32] See Rothman at par. 33.
[33] See Rothman at par. 37.
[34] See Rothman at par. 37.
[35] Kim at par. 64.
[36] Kim at par. 45.
[37] Kim at par 47, lines 16-20.
[38] Specification at pars. 6-9 on pp 2-3.

Kim does not teach or suggest maintaining an address or access to an address for a bootable image on the client. Kim does not teach or suggest a selecting bootable image on the remote computer. Kim does not teach or suggest generating a wake-on-LAN packet with a partition identification. Kim does not teach or suggest generating a wake-on-LAN packet with an address for a bootable image on the remote client. Kim does not teach or suggest generating a wake-on-LAN packet with an address of a selected bootable image on the remote client. And, Kim does not teach or suggest transmitting such a packet.

Assuming, in arguendo, that Girard, Rothman, Dayan, and Kim can be combined as suggested in the Office action, the combination teaches an authentication of a communication with a remote computer system that can provide one or more bits to indicate to the remote computer system to either boot from the hidden partition or not to boot from hidden partition and also can send a packet to instruct the remote computer system to read or write from a memory address within the remote system. This is different from and does not teach or suggest a server computer system capable of selecting the bootable image on the remote client that comprises software to determine the trustworthiness of a software application on a maintenance server prior to executing the software application. The combination does not teach or suggest a server computer system capable of generating a wake-on-LAN packet with a partition identification, the partition identification comprising an address of a location of the bootable image, to identify the location within a local resource of the remote client. And, the combination does not teach or suggest a server computer system capable of transmitting the wake-on-LAN packet to the remote client to wake up the remote client and to instruct a pre-boot application of the remote client to boot via the bootable image.

Despite the attempt to combine four references to find claim 13 obvious, the rejection fails to cite a reference that transmits an address that is within the remote client for the purpose of executing code, let alone for the purpose of designating an alternate bootable image to boot the remote client. The combination fails to teach or suggest selecting a bootable image on a remote client. And, the combination fails to teach or suggest maintenance of data or access to data about a remote client including an address

of a bootable image on the remote client, which is inherent to an ability to select the bootable image on the remote client.

To establish a prima facie case of obviousness, the combination must teach or suggest all of Applicants' claim limitations.[39] The combination fails to teach or suggest all of Applicants' claim limitations. Thus, the combination of Girard, Rothman, Dayan, and Kim fails to establish a prima facie case of obviousness.

Furthermore, modification of Girard with Dayan, Rothman, and Kim to perform claim 13 changes a principle of operation of Girard. In particular, Girard describes downloading the boot code to the remote client after establishing contact with the remote client.[40] The combination of Girard with Dayan to select the alternative boot partition on the remote client changes a principle of operation of Girard because the combination does not download the bootable image or boot code from the managing server to the remote client.[41] Thus, it would not be obvious to a person of ordinary skill in the art to make these modifications, especially considering that the combination of the references do not teach or suggest the limitations of claim 13. Applicant argues that the Office action fails to provide prima facie evidence for the rejections of claims 13 so the rejections should be reversed.

2. Claims 14 and 40

The dependent claims 14 and 40 of independent claim 13 incorporate the limitations of independent claim 13. The combination of references fail to teach or suggest the limitations of independent claim 13. Thus, the combination does not teach or suggest all the limitations of dependent claims 14 and 40, and Applicant respectfully argues that the rejections of the claims be reversed and the dependent claims should be allowed.[42]

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[39] *In re Royka*, 490 F.2d 981, 985, 180 USPQ 580, 583 (CCPA 1974).
[40] Girard at col. 7, lines 16-20.
[41] Girard at col. 7, lines 16-20.
[42] See *In re Royka*, 490 F.2d 981, 985, 180 USPQ 580, 583 (CCPA 1974).

C. Claims 48 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Girard in view of Dayan, in view of Rothman, and in view of Connery

The combination of Girard, Dayan, Rothman Kim, and Connery fails to establish a prima facie case of obviousness for dependent claims 48 and 50 because the combination fails to teach or suggest all of Applicants' claim limitations. The combination fails to teach or suggest generating a wake-on-LAN packet with a parameter for the bootable image, the parameter to instruct the bootable image to initiate the software application.

Connery describes a wake-on-LAN packet that allows for signaling power management circuits of a host computer (such as the client computer that receives the packet) in response to messages received through a network interface.[43] The network interface card of the host computer may then generate a response to the message, such as a UDP packet, if desired.[44] The combination of Girard, Dayan, Rothman, and Connery does not teach or suggest including a parameter with a partition identification for a bootable image to instruct the bootable image to initiate a software application of the maintenance server. Thus, the combination fails to support a prima facie case for obviousness of claims 48 and 50.

Furthermore, the dependents of claims 1 and 15 incorporate the limitations of claims 1 and 15. Connery fails to supplement the shortcomings of Girard, Dayan, and Rothman for teaching or suggesting the limitations of these independent claims. Thus, the combination of Girard, Dayan, Rothman, and Connery does not teach or suggest all the limitations of dependent claims of claims 48 and 50, and Applicant respectfully argues that the rejections of the claims be reversed and the dependent claims should be allowed.[45]

D. Claim 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Girard in view of Dayan, in view of Rothman, in view of Kim, and in view of Connery

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[43] See Connery at Abstract.
[44] See Connery at col. 7, lines 53-55.
[45] See *In re Royka*, 490 F.2d 981, 985, 180 USPQ 580, 583 (CCPA 1974).

The combination of Girard, Dayan, Rothman Kim, and Connery fails to establish a prima facie case of obviousness for dependent claim 49 because the combination fails to teach or suggest all of Applicants' claim limitations. Connery describes a wake-on-LAN packet that allows for signaling power management circuits of a host computer (such as the client computer that receives the packet) in response to messages received through a network interface.[46] The network interface card of the host computer may then generate a response to the message, such as a UDP packet, if desired.[47] The combination of Girard, Dayan, Rothman, Kim, and Connery does not teach or suggest including a parameter with a partition identification for a bootable image to instruct the bootable image to initiate a software application of the maintenance server. Thus, the combination fails to support a prima facie case for obviousness of claim 49.

Furthermore, the dependents of claim 13 incorporate the limitations of independent claim 13. Connery fails to supplement the shortcomings of Girard, Dayan, Rothman, and Kim for teaching or suggesting the limitations of independent claim 13. Thus, the combination of Girard, Dayan, Rothman, Kim, and Connery does not teach or suggest all the limitations of dependent claim 49, and Applicant respectfully argues that the rejections of the claims be reversed and the dependent claims should be allowed. [48]

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[46] See Connery at Abstract.
[47] See Connery at col. 7, lines 53-55.
[48] See *In re Royka*, 490 F.2d 981, 985, 180 USPQ 580, 583 (CCPA 1974).

Conclusion

Applicant respectfully addresses the objections and traverses the claim rejections under 35 USC § 103. Accordingly, Applicant believes that this appeal brief constitutes a complete response to each of the issues raised in the final Office action. In light of the accompanying remarks, Applicant believes that the pending claims are in condition for allowance. Thus, Applicant requests that the final rejections of the current claims be reversed as improper.

A request for an extension along with the corresponding fee accompanies this brief. No other fee is believed due with this paper. However, if any fee is determined to be required, the Office is authorized to charge Deposit Account 500563 for any such required fee.

Respectfully submitted,

February 12, 2010	/Jeffrey S Schubert/
Date	

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VIII. CLAIMS APPENDIX

TEXT OF CLAIMS PRESENTED ON APPEAL

WHAT IS CLAIMED IS:

1. A method for booting a remote client via a bootable image on the remote client over a network, the method comprising:

selecting the bootable image on the remote client to boot the remote client, the bootable image comprising software to determine the trustworthiness of a software application on a maintenance server prior to executing the software application, for the remote client;

generating a wake-on-LAN packet with a partition identification, the partition identification comprising an address of a location of the bootable image, to identify the location within a local resource of the remote client; and

transmitting the wake-on-LAN packet to the remote client to wake up the remote client and to instruct a pre-boot application of the remote client to boot via the bootable image.

2. The method of claim 1, wherein selecting the bootable image comprises selecting the bootable image from a drive, the drive being internal to the remote client.

3. The method of claim 1, wherein selecting the bootable image comprises selecting the bootable image from a secure resource of the remote client.

4. The method of claim 3, wherein selecting the bootable image from the secure resource comprises selecting the bootable image from a hidden partition associated with the remote client.

5. The method of claim 1, wherein selecting the bootable image comprises selecting a logical address for the bootable image, the logical address to be associated with the bootable image by the remote client.

6. The method of claim 1, wherein generating the wake-on-LAN packet comprises extending the wake-on-LAN packet with the partition identification.

7. The method of claim 1, wherein generating the wake-on-LAN packet comprises generating a parameter to associate with the partition identification to provide a post-boot instruction to the remote client.

8.-11. (Cancelled)

12. The method of claim 1, wherein transmitting comprises broadcasting the wake-on-LAN packet to the remote client and at least one other remote client.

13. A data processing system for booting a remote client via a bootable image on the remote client on a network, the system comprising:

a server computer system in communication with at least one client computer system, the server computer system comprising a processor capable of selecting the bootable image on the remote client to boot the remote client, the bootable image comprises software to determine the trustworthiness of a software application on a maintenance server prior to executing the software application, for the remote client;

wherein the server computer system is capable of generating a wake-on-LAN packet with a partition identification, the partition identification comprising an address of a location of the bootable image, to identify the location within a local resource of the remote client;

wherein the server computer system is capable of transmitting the wake-on-LAN packet to the remote client to wake up the remote client and to instruct a pre-boot application of the remote client to boot via the bootable image; and

a database, the database comprising an indication of one or more clients and the status of their wake-on-LAN functionality.

14. The data processing system of claim 13, further comprising an Ethernet network coupled to the server computer system and the at least one client computer system.

15. A computer program product comprising a machine-accessible storage medium containing instructions, which when executed by a machine, cause said machine to perform operations, comprising:

selecting a bootable image on the remote client to boot the remote client, the bootable image comprising software to determine the trustworthiness of a software application on a maintenance server prior to executing the software application, for a remote client;

generating a wake-on-LAN packet with a partition identification, the partition identification comprising an address of a location of the bootable image, to identify the location within a local resource of the remote client; and

transmitting the wake-on-LAN packet to the remote client to wake up the remote client and to instruct a pre-boot application of the remote client to boot via the bootable image.

16. The computer program product of claim 15, wherein selecting the bootable image comprises selecting the bootable image from a secure resource of the remote client.

17. The computer program product of claim 15, wherein generating the wake-on-LAN packet comprises extending the wake-on-LAN packet with the partition identification.

18. The computer program product of claim 15, wherein transmitting comprises broadcasting the wake-on-LAN packet to the remote client and at least one other remote client.

19-37 (Cancelled).

38. The method of claim 1, further comprising downloading the software application from the maintenance server to the remote client subject to a determination of the trustworthiness of the maintenance server by the remote client.

39. The method of claim 1, further comprising passing a parameter to the bootable image to initiate the software application on the maintenance server subject to a determination of the trustworthiness of the maintenance server by the remote client.

40. The data processing system of claim 13, further comprising wherein the server computer system is capable of downloading the software application by the maintenance server to the remote client subject to a determination of the trustworthiness of the maintenance server by the remote client.

41. The computer program product of claim 15, further comprising downloading the software application by the maintenance server to the remote client subject to a determination of the trustworthiness of the maintenance server by the remote client.

42.-47. (Cancelled).

48. The method of claim 1, wherein generating the wake-on-LAN packet comprises generating a wake-on-LAN packet with a parameter for the bootable image, the parameter to instruct the bootable image to initiate the software application.

49. The data processing system of claim 13, wherein the server computer system is capable of generating a wake-on-LAN packet with a parameter for the bootable image, the parameter to instruct the bootable image to initiate the software application.

50. The computer program product of claim 15, wherein generating the wake-on-LAN packet comprises generating a wake-on-LAN packet with a parameter for the

bootable image, the parameter to instruct the bootable image to initiate the software application.

IX. EVIDENCE APPENDIX

Other than the Office Action(s), prior Appeal brief, and reply(ies) already of record, no additional evidence has been entered by Appellants or the Examiner in the above-identified application which is relevant to this appeal.

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X. RELATED PROCEEDINGS APPENDIX

There are no related proceedings as described by 37 C.F.R. §41.37(c)(1)(x) known to Appellants, Appellants' legal representative, or assignee.